EQUIP2
Educational Quality Improvement Program
Policy ▪ Systems ▪ Management

WORKING PAPER

Meeting EFA: Cost-Effectiveness of Complementary Approaches

Introduction

National education systems have provided primary education to the great majority of school-age children in developing countries, but in many cases have failed to reach historically underserved populations. Traditional education models hold little promise for meeting Education for All (EFA) goals of achieving access, completion, equity, and learning outcomes. With well-defined criteria for support, a clear set of metrics for evaluating sectoral policy and strategies, and a framework for aligning and committing external resources, the Fast Track Initiative (FTI) represents the best response to the monumental challenge of mobilizing resources to educate the world's poorest children. However, the experiences of large-scale sector investment programs indicate that better use of additional resources is as much a challenge as mobilizing funding. While FTI calls for improved education sector policies and management, it does not call for a dramatic rethinking of strategies for providing education.

However, dramatic rethinking by both donors and ministries of education is required if cost-effective basic schooling is to be provided to the populations that education systems are least able to serve. Across the developing world, the children not in school are often poor, isolated, and victimized by historic patterns of discrimination. Universal and equitable access to quality basic education requires devising innovative strategies to reach these underserved populations. The World Bank-published *World Development Report 2004* states, "Too often [government] services fail poor people. They are often inaccessible or prohibitively expensive. But even when accessible, they are often dysfunctional, extremely low in quality, and unresponsive to the needs of a diverse clientele." (World Bank, 2004, p. 19) Additional resources for expanding and improving the government public education systems in many countries will not, by themselves, address the great majority of schools' problems in the most remote, poor, or disadvantaged areas. Entirely different approaches to governance, management, and accountability will also be required if quality basic education is to be made universally available at a cost that governments can afford.

The success of alternative approaches to education provision implies a decidedly innovative approach to EFA, couched in terms of the availability of financial resources. Rather than focusing on the supply of donor funds for education, case studies show that provision of quality education to underserved populations may rely on spending available resources differently to achieve better results. Instead of building government capacity to expand public schools to underserved regions, enlisting and building the capacity of a whole range of civic actors represents a cost-effective option to meeting EFA among particular groups.

This Working Paper summarizes findings from case studies of three large-scale complementary models of providing basic education—School for Life in Ghana,

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Case studies from Ghana, Honduras, and Mali show that complementary education approaches:

- *Enable countries to meet EFA goals in underserved populations;*
- *Are cost-effective; and*
- *Provide quality education.*

Educatodos in Honduras, and Community Schools in Sikasso, Mali—which are available as part of the EQUIP2 Meeting EFA Country Briefs series.[1] The analyses in each case study seek to answer two primary questions:

- Does the model contribute to EFA goals of access, completion, and learning?
- Does it do so in ways that are cost-effective?

The School for Life and Community Schools projects serve populations in regions where access to the public education system is severely limited. The Educatodos program provides students, young adults, and older citizens who have dropped out of school opportunities to obtain basic education through alternative means. All three programs deliver schooling equivalent to the formal public curriculum and are designed and implemented by civil society actors with involvement and support from all levels of the education system. These three particular case studies are relevant to FTI because they:

- Show how complementary models affect access, completion, and learning;
- Shed additional light on the financial requirements of EFA—not just for access, but also for achieving completion and learning;
- Provide examples of different ways to use and manage resources; and
- Provide insight into policy and institutional arrangements needed to more rapidly expand and improve the delivery of basic education.

Better understanding of these kinds of projects and programs—which have on-the-ground experience organizing quality basic education for underserved populations—arguably has more to contribute to meeting EFA goals than another round of large-scale sector investment strategies that rely on infusions of resources, policy reforms, and ministry capacity building. This is not to say that resources, reforms, and capacity are not needed. In fact, research on complementary models will help clarify what resources are needed and show how they can be invested and managed differently. This research can also identify the policies that promote complementary and alternative approaches to providing basic education, as well as demonstrate how combinations of different capacities—governmental and nongovernmental, centralized and decentralized—can be mobilized, organized, and reinforced.

The implications of this study, which analyzes the costs and cost-effectiveness of three models, and ongoing research into complementary approaches to providing basic education include the following:

- The challenge of EFA can only be met through a variety of strategies aimed at reaching underserved populations and regions within each country.
- Civil society organizations that act as intermediaries and reinforce decentralized capacity to promote and organize basic education are key to those strategies.
- Analysis of the cost-effectiveness of different approaches shows how resources can be used more effectively.

- The cost of meeting EFA should include estimates of the costs of producing basic education completers with demonstrated learning, not just the cost of access.

The Cases

Data are available for analysis of three cases: Ghana, Honduras, and Mali. The three cases illustrate how complementary models respond to the challenges of meeting EFA goals in different contexts. These and other complementary education models have a number of common elements:

- Specifically designed to reach populations not adequately served by the formal system;
- Delivery of schooling equivalent to the formal public curriculum but not meant as informal alternatives;
- Designed and implemented by civil society actors with involvement and support from all levels of the education system;
- Use of alternative approaches to staffing, management, and accountability;
- Operation on a scale large enough to exhibit some education system features (e.g., standardized approaches to teacher recruitment and training, systematized oversight and management, networking, accountability).

The complementary models researched for this study were designed to respond to the problems of limited access, high drop-out rates, and failure to serve certain sections of the population.

In Mali, the government public school system still fails to serve the majority of school-age children, especially in certain regions. In Ghana, where access to basic education is much higher, one part of the country is persistently underserved. Honduras, like most of Latin America, has near universal access to primary schooling but high drop-out rates before completion of basic education. The complementary models researched for this study were designed to respond to these problems.

Community Schools in Mali and School for Life in Ghana are examples of nongovernmental initiatives leading to the development and implementation of programs aimed at specific regions. In both cases, access to basic education in the target regions—the Northern Region in Ghana and Sikasso in Mali—was very limited. The programs developed as alternative equivalents to the primary education offered in official public schools. The Educatodos program in Honduras is intended to provide an opportunity for students who have dropped out of school to obtain basic education through alternative means by providing learning opportunities mostly to people over the age of 20 in homes, factories, businesses, schools, and community centers scattered throughout the country.

Analysis of the Cases

The research has several potential implications for the EFA-FTI. Data regarding the impact and cost-effectiveness of proven approaches to providing basic education to underserved populations are vital. Analyses of costs per student enrolled, per basic education completer, and per student achieving a desired learning outcome provide additional insight into the full financial requirements for meeting the EFA goals. Comparisons of cost-effectiveness measures for the three cases discussed here and

government-run schools inform the dialogue about how to best estimate the resources required to achieve universal access and completion and a desired level of learning achievement. Furthermore, the organization and operation of these complementary education systems help identify the institutional arrangements and capacities needed to help education succeed in meeting the EFA goals.

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Data on each of these cases and government provision of schooling in the three countries were gathered from secondary sources. The many caveats are explained in a methodological supplement available upon request. Some data are more reliable than others, depending on the source, completeness, and time period. The results are, therefore, indicative and should not be taken as precise calculations of true impact or cost-effectiveness.

The case studies found that unit costs of School for Life and Community Schools are higher than estimated unit costs for public schools in Ghana and Mali, respectively. However, the projects reach students not served by the public schools. If the government system were to provide access to these same students, public sector per student costs would arguably increase. As these projects serve otherwise underserved populations according to a specific annual budget, they represent the best available estimates of the actual cost of providing schooling in these regions. In contrast to School for Life and Community Schools, Educatodos has unit costs considerably lower than the formal schools at both the primary and lower secondary levels, according to the case study.

The case study found that School for Life is over three times as cost-effective as traditional public schools in Ghana at producing a grade three completer. Moreover, when tested, 81 percent of School for Life students demonstrated that they could read and calculate well. Community Schools in Mali have higher unit costs than public schools but also have better rates of completion—67 percent compared to 56 percent—and higher pass rates on the primary cycle completion exam—51 percent compared to 43 percent, according to the case study. Unit costs in those schools are 57 percent higher than in public schools, but the cost per completer is only 31 percent higher and the cost per learning outcome is only 10 percent higher, according to the case study. The Honduras case study found that Educatodos is almost five times as cost-effective as public schools at producing a grade six completer. For grades seven to nine, the case study found that Educatodos has both a higher completion rate and much lower costs, making it 15 times as cost-effective as the public system at producing a grade nine completer.

Summary of Findings: Costs and Cost-Effectiveness

In each of the cases being studied, costs have been assessed in absolute terms, as well as with respect to the contributions made to the EFA goals of access, completion, and learning, with the ultimate objective of identifying how cost-effectively the models contribute to EFA. The following table summarizes how costs have been evaluated in relation to the three goals and compares each program's cost-effectiveness to the best available estimate of the public school system's cost-effectiveness at the equivalent level.

The cost of access is measured as the expense to provide one child a space for each year of schooling. The cost of completion is calculated by multiplying the annual per student cost by the number of years for a given level of schooling and then dividing by the percentage of those who complete the level. The cost of producing a learning outcome is based on the percentages of those completing the level of schooling and demonstrating the desired level of learning.[2]

	ACCESS per student per year enrolled	COMPLETION per student completing a specific grade	LEARNING per student demonstrating learning
Ghana – School for Life	$39	$43	$52
Ghana – Public Schools	$27	$135	$1,500
Honduras – Educatodos 7-9	$80	$180	—
Honduras – Public Schools 7-9	$234	$2,736	—
Mali – Community Schools	$47	$421	$875
Mali – Public Schools	$30	$322	$749

The School for Life term is shorter and arguably more educationally effective than Ghana public schools'.

Educatodos offers a condensed and potentially more efficient and less costly approach to increasing access to basic education in Honduras.

Mali Community Schools effectively provide education to populations outside the public system's range.

Given the questionable validity of sub-national data and the problems associated with comparing different measures of student learning, the figures above are not meant to be precise but, rather, indicate a pattern. Given existing levels of efficiency, many more resources will be needed to achieve completion and learning than are needed to just achieve access. Given the current rates at which enrolled students complete a given grade level and acquire a demonstrable level of learning, the costs per completer and per unit of learning far exceed the cost of providing access. For example, in public schools in Ghana, it costs almost four times as much to produce a third grade completer than it does to enroll a student for a year. When learning is taken into account, the effect is even more pronounced. The challenge lies in estimating the resources required not just to achieve access goals, but to attain universal completion and learning. How can innovative approaches better and more cost-effectively assure completion and learning?

For example, the School for Life term is shorter and arguably more educationally effective than Ghana public schools' and, therefore, has dramatically lower completion and learning costs. The program holds promise for thinking differently about how to organize access to basic education. Educatodos also offers a condensed and potentially more efficient and less costly approach to increasing access to basic education. The case study found Mali Community Schools more costly but more effective. They may more accurately reflect the costs associated with providing a viable basic education to populations outside the public system's range.

The analyses completed for this study also indicate that complementary or alternative models for providing access to basic education can affect achievement of EFA goals and present possible complementary investment strategies. The following two charts illustrate that resources promoting or extending a diversity of models for providing quality basic education to underserved populations may contribute more to achieving

the EFA goals of access, completion, and learning than those spent on linear expansion of the public school system.

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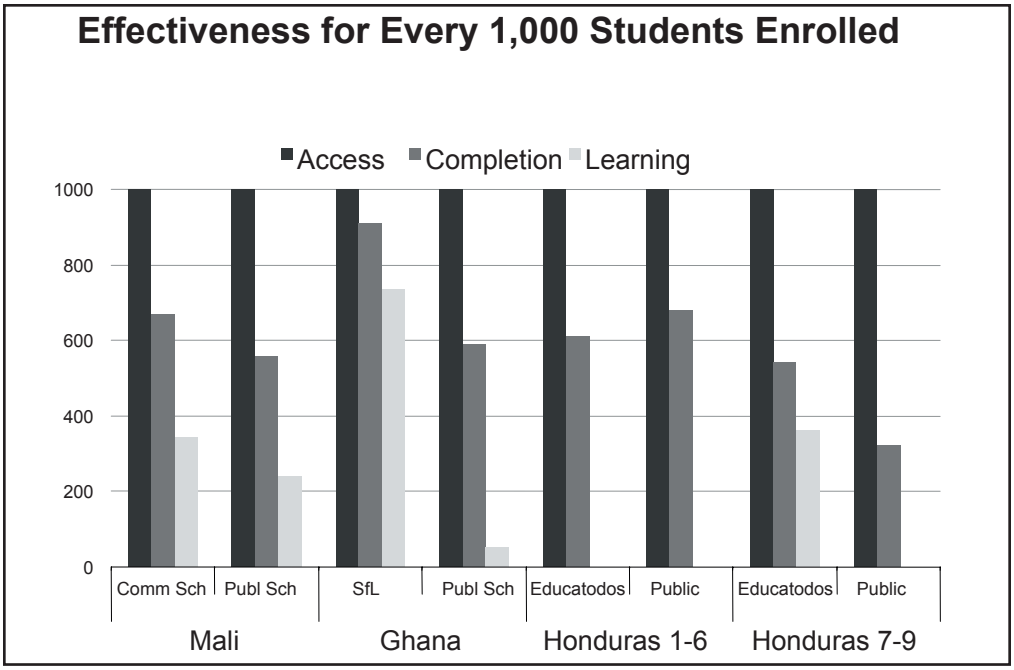
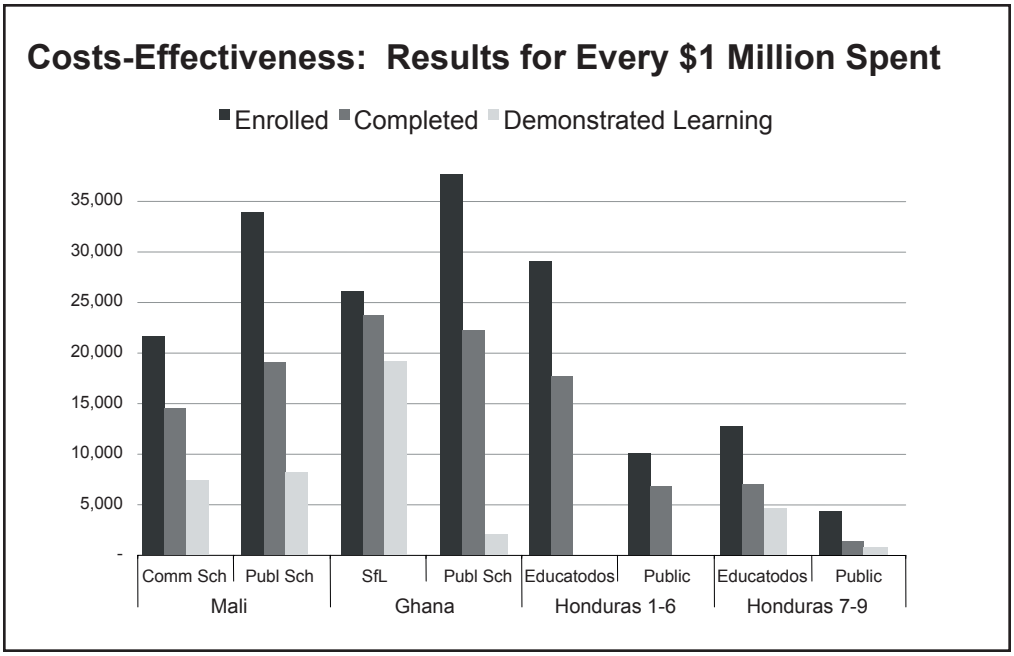




The first chart compares each program in terms of its potential contribution to completion and learning. In each case except the primary program in Honduras, the complementary models produce more completion and, where measures are available, more learning for every 1,000 students enrolled. The second chart takes into account

the costs of public and program schools. It shows the results that could be achieved for every $1 million spent, in terms of the number of students enrolling, completing, and demonstrating learning. While the data are too imprecise to allow confidence in accuracy of the calculations, they do indicate comparisons that are useful to make when considering sector investment strategies and the comparative impact and effectiveness of different investments. For example, $1 million dollars spent on School for Life in Ghana appears to buy more third grade completion and learning than the same amount spent on expanding the existing provision of primary schooling. Resources used to organize community-based provision of schooling like School for Life may make more of a contribution to reaching the EFA goals than those same resources used to expand the prevailing government model. Discussion of whether the EFA goals can be reached by 2015 and consideration of the resource requirements and investments needed to take the best possible shot at meeting those goals needs to include this kind of analysis and careful research and review of the experience of complementary and alternative approaches to providing basic education.

Community Schools increased the net admission rate by 14 percent and gross intake capacity by 15 percent in Mali.

Summary of Findings: Access and Completion

This section examines the specific contributions each of the three complementary approaches has made to increasing access and completion. Access is examined in terms of target population enrollment, and completion is evaluated on the basis of the percentage of enrollees that complete the education program—reaching sixth grade in a Community School in Mali, successfully finishing the nine-month equivalent of third grade in Ghana, and reaching the Educatodos equivalents of grades six and nine in Honduras.

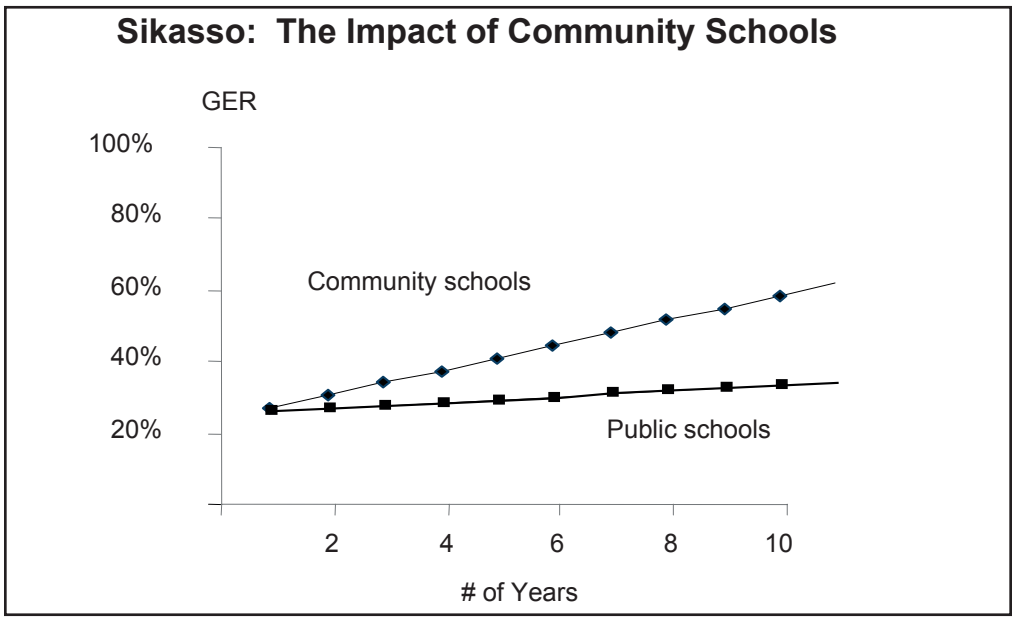
Mali

Government schooling in Mali has grown at a fast pace over the last decade but still only accommodates 44 percent of students age seven to 12. The case studies found that Community Schools have grown at an even faster rate during that period. According to the Ministry of Education *Annuaire des statistiques scolaires de l'enseignement fundamental, 2002-2003*, Community Schools accommodated 230,000 primary school students and increased the primary gross enrollment rate to 56 percent in 2003. Private schools and madrasas enrolled an additional 200,000 primary school students, bringing the total gross enrollment rate to 67 percent for the country. Mali public schools had a first grade equivalent gross intake capacity of 46 percent of seven-year-olds and a net admission rate of 39 percent in 2002-2003. Community Schools increased the net admission rate to 53 percent and gross intake capacity to 61 percent.

The following graph shows expansion of access in Sikasso from 1993 to 2003. In 1992, the primary school gross enrollment rate in Sikasso was 27 percent with a negligible Community Schools contribution of 240 students. The public sector expanded during the ensuing decade, growing slowly to achieve a 35 percent gross enrollment rate in 2003. The additional enrollment offered by Community Schools greatly increased the rate of expansion of access and increased gross enrollment to 62 percent in 2003. Community schooling in Sikasso grew from four to 900 schools over a period of just

10 years. Gross enrollment grew an average of 3.5 percent each year—a rate that would achieve 100 percent enrollment in 14 more years. Without community schooling, gross enrollment increased an average of only 0.8 percent per year during the same period.

Ghana School for Life increased fourth grade attainment by over 60 percent.



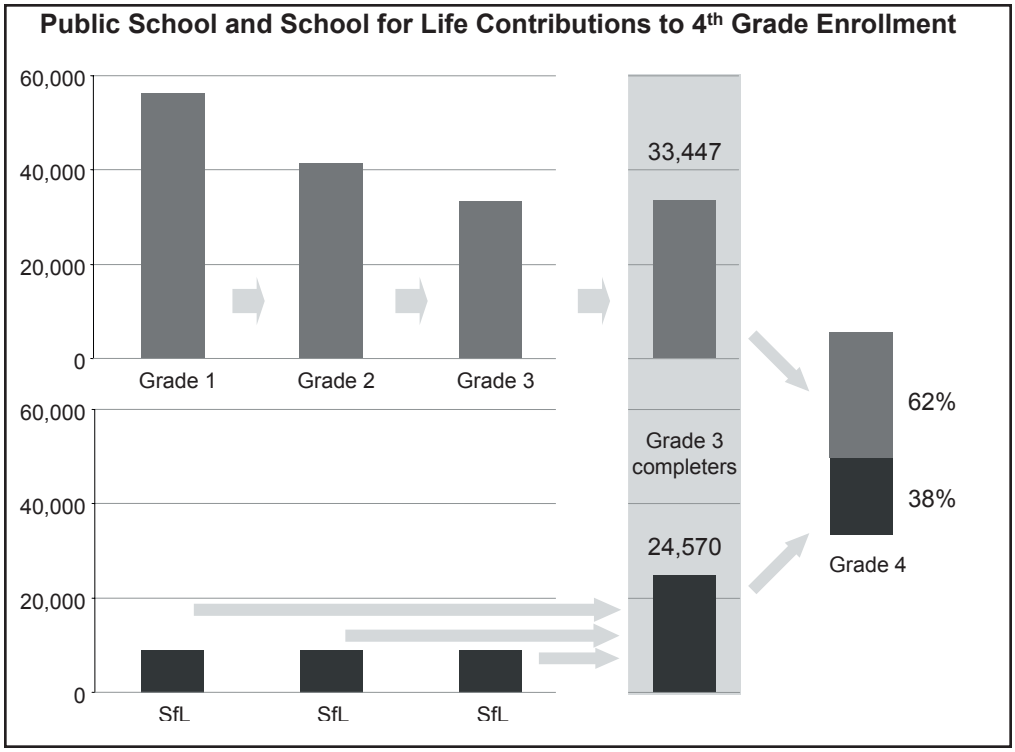
In villages with Community Schools, the gross admission rate into primary school reached 96 percent in 2003. For public schools in Sikasso, the rate is only 48 percent. According to the Ministry of Education synthetic cohort analysis of net repeaters, an estimated 56 percent of public school students admitted to first grade reached sixth grade, with an estimated 49 percent for girls. According to Save the Children's *Annuaire statistique des écoles communautaires, rentrée scolaire, 2002–2003*, Community Schools in Sikasso report a grade six completion rate of 67 percent and 57 percent for girls. Community Schools are 20 percent more effective overall at producing completers and 16 percent more effective for girls.

Ghana

From 1990 to 2000, Ghana's primary education gross enrollment rate climbed from 75 percent to 89 percent, according to the Ministry of Education 2000 Education Measurement Information System (EMIS). Since 2000, that number has slipped back to 80 percent as expansion of schooling has failed to keep pace with the growing school-age population. The Northern Region has persistently had a rate of access to basic education much lower than the national average. From 1990 to 2000, the gross enrollment rate in public schools in the Northern Region increased from 51 to 60 percent.

School for Life targets villages where there is no formal school or where enrollment in basic education is extremely low. According to the case study, it provides schooling in 767 communities, reaching approximately 25 percent of the villages in eight districts of Ghana's Northern Region. In each of the last five years, School for Life averaged 9,000 enrollees in its nine-month version of grades one to three, with 91 percent of students

completing the program. Of those who complete, 66 percent continue to fourth grade in a formal school. In Northern Region public schools, 48 percent of students who enter first grade reach fourth grade. The following figure illustrates how School for Life increases fourth grade attainment in the Northern Region by over 60 percent.



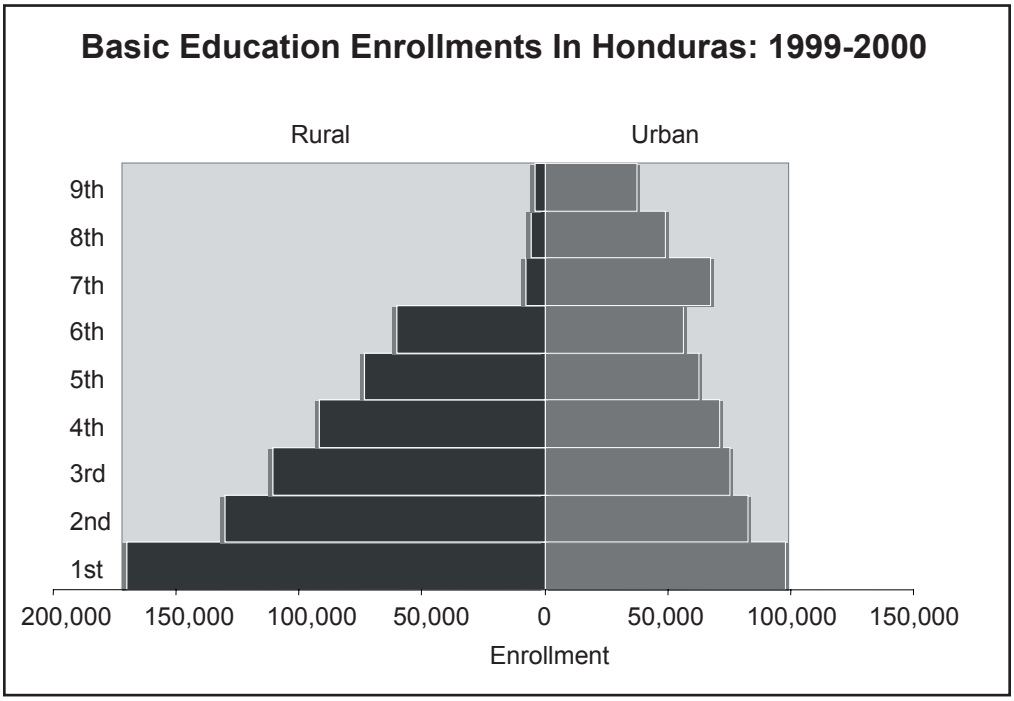
Educatodos has a ninth grade completion rate over 20 percent higher than Honduran public schools.

Honduras

Up-to-date data on education in Honduras are difficult to obtain because natural disasters destroyed most public records. Available data show a net enrollment rate for grades one to six of 87 percent in 2001. Net enrollment drops off considerably after sixth grade, with only 29 percent of 13- to 18-year-olds in seventh through twelfth grade. The following graph shows how drop-outs increase, especially in rural regions, as students move through the basic education cycle. Access to basic education in Honduras is, therefore, less of a problem than persistence through the full academic cycle. To build its human resource base, Honduras must consider what to do with students who drop out before completing the nine years of basic education.

Educatodos targets youth and young adults who have dropped out and older adults seeking alternative means to obtain the basic education they failed to complete as children. Approximately one-third of Educatodos' enrollment is under age 20; another third is 20 to 30 years old; and the remaining third is over 30. Over 80 percent of the Educatodos learning centers are in rural regions.

Since 1996, Educatodos has enrolled over 500,000 students with an overall completion rate near 70 percent.



In 2003, Educatodos enrolled 117,656 students with 13,000 in the grade-seven-to-nine-equivalent program and the remainder in the grade-one-to-six-equivalent program. Since its inception in 1996, Educatodos has enrolled over 500,000 students. Rates of completion for the primary program and for public primary schools are both between 60 and 70 percent. The Educatodos grade-seven-to-nine-equivalent program began in 2001 and has enrolled approximately 23,500 students. The case study found an average of 54 percent complete ninth grade, compared to 32 percent in public schools.

Findings: Comparative Costs of Programs

All three programs provide education access to underserved populations and contribute to completion. This study presents the cost of each of these programs as well as the public sector cost of providing access to comparable levels of basic education in each country. Costs are analyzed from the perspective of the total cost of running each program, as well as the cost per student, and are presented in the following table.

	Complementary Approach			Comparable Level in Public System
	Total Costs[3]	Total Recurrent Costs[4]	Recurrent Cost per Student	Recurrent Cost per Student
Ghana	$3 million	$1.6 million	$39	$27
Honduras 1-6	$18.6 million	$13.6 million	$40[5]	$102
Honduras 7-9	$7.6 million	$1.1 million	$80	$292
Mali	$3 million	$2.6 million	$47	$30

Total costs are indicative of the full resource requirement for mounting and running these types of complementary programs. The full budget for operating the Save the Children project in Mali during the 1990s was reviewed, including the costs for both starting and running the schools and including all contributions from donors, governments, nongovernmental organizations, and communities. Recurrent costs are distinguished from total costs as a means to show the expense of operating the projects once they are up and running. Total recurrent costs are then translated into unit operating costs per student. As a point of comparison, unit costs within the public system are also calculated. These unit costs are based on national recurrent expenditures on basic education divided by the total enrollment in the indicated grades. For a more detailed discussion of costs for the Save the Children schools in Mali during the 1990s, see Karen Tietjen's *Community Schools in Mali: A Comparative Cost Study*, published by the United States Agency for International Development (USAID) in 1999.

In Ghana and Mali, case studies found that costs per student in the complementary approaches are higher than the estimated unit costs for public schools. However, these two projects—by design—are reaching students not served by public schools. If the traditional public school system were to provide access to these students—developing schools, supporting and maintaining supervisory functions, assigning and keeping teachers in hard-to-reach areas—the government's per student costs would arguably increase. The projects in Ghana and Mali represent relatively reliable estimates of the actual costs of providing schooling in underserved regions. In contrast, Educatodos has costs considerably lower than those of formal schools at both the primary and lower secondary levels, according to the case study.

If the traditional public school system were to provide underserved students equal access to quality education in Ghana and Mali, the governments' per student costs would arguably increase to a level higher than those of School for Life and Community Schools.

In Mali, a USAID grant covers 90 percent of the expenses related to the Save the Children Community Schools program. Communities contribute about 7 percent, Save the Children contributes the remaining 3 percent, and Ministry of Education contributions are negligible. The Ghana Danish Communities Association covers almost all the costs of School for Life. USAID funds two-thirds of Educatodos, and the Ministry of Education contributes roughly one-third.

Findings: Cost-Effectiveness of the Programs

Cost-effectiveness is examined from two perspectives. First, unit costs are translated into costs per student completing the indicated level of education. In the case of Mali, this involves comparing the cost of producing a student with grade six completion in Community Schools and public schools. For Honduras, grade six and nine completion in Educatodos is compared to grade six and nine completion in the public system. In Ghana, the costs related to third grade completion for one student in School for Life are compared to costs per third grade completer in public school. The following table presents the results of these analyses.

	Competion Rate	Cost per Completing Student
Ghana – School for Life	91%	$43
Ghana – Public Schools	59%	$142
Honduras – Educatodos 1-6	61%	$197
Honduras – Public Schools 1-6	68%	$803
Honduras – Educatodos 7-9	54%	$180
Honduras – Public Schools 7-9	32%	$2,736
Mali – Community Schools	67%	$421
Mali – Public Schools	56%	$322

School for Life is three times as cost-effective as the public school system at producing a third grade completer in Ghana.

Mali Community Schools demonstrate a cost per learning outcome only 10 percent higher than public schools while serving a population that would otherwise not have access to education.

Educatodos is five times as cost-effective as the Honduran public school system at producing a sixth grade completer and 15 times as cost-effective at producing a ninth grade completer.

The Ghana case study found School for Life over three times as cost-effective as public schools at producing students with the equivalent of third grade completion, in part because 91 percent of students complete School for Life's nine-month program but only 48 percent of students make it through three years of public schooling.

In contrast, the Mali case study found that Community Schools are less cost-effective at producing grade six completers than the government schools. However, because Community Schools have higher completion rates, their lower cost-effectiveness is arguably due exclusively to their higher unit costs. Two things are of interest in looking at this case. First, Community Schools serve a population that would otherwise not have access to school, as demonstrated earlier. This should be compared to what it would cost the government to extend access to the villages served by Community Schools, not just the cost of running the existing system. Second, Community Schools opted to copy the public schools' six-year cycle—unlike School for Life—perhaps missing an opportunity to model a shorter path to attainment of a grade-six-equivalent education.

The Honduras case study found that Educatodos has similar completion rates to the government system but costs less per student and takes three years to complete, as compared to six. As shown in the table and according to the case study, Educatodos is almost five times as cost-effective as the public schools at producing a sixth grade completer. For grades seven to nine, Educatodos has a higher completion rate and much lower costs, making it 15 times as cost-effective as the public system at producing a ninth grade completer, per case study data. Although Educatodos serves a dramatically different student body—almost all above primary school age—it is a cost-effective way to help young adults recapture schooling they did not obtain as children.

In addition to cost per completer, this study analyzes the cost per student demonstrating a desired learning outcome. Data from systematic testing and evaluation of student performance related to literacy and math are only available for the School for Life and Educatodos programs. For Mali, the primary education leaving exam (CEP) provides student pass rates through which cost numbers are analyzed.

In 2003, School for Life requested that the Ghana Education Service (GES) test its pupils toward the end of the nine-month cycle. According to the School for Life

February 2004 *End of 8th Cycle Report*, the tests showed that 52 percent of the children could read with comprehension, calculate with mastery (i.e., at a third grade level), and write. Eighty-one percent of School for Life students met a level of proficiency, defined as the ability to read and calculate well. This translates into a cost per learning outcome of $52 per student. Data on student learning in Ghana public schools are limited. Results from annual tests given to a 10 percent national sample of students in sixth grade show only 9 percent achieved a minimum competency level in English. Assuming the same percentage of third graders meeting a competency standard in language studies, the public school cost per learning outcome at that level would be $1,500.

The 2003 CEP pass rate for public schools in the Kolendieba subregion of Sikasso, Mali was 43 percent, compared to 51 percent in Community Schools. This translates into costs per learning outcome of $749 and $825 per student for the public schools and Community Schools, respectively. When considering the cost-effectiveness of Community Schools in Mali, it is interesting to note that unit cost in those schools is 57 percent higher than in public schools, but the cost per completer is only 31 percent higher, and the cost per learning outcome is only 10 percent higher because, according to the case study, Community Schools are more effective at producing sixth grade completers who can pass the CEP.

In Honduras, data are available on student learning in grades seven to nine. An external evaluation was conducted of Educatodos to measure student learning in comparison to students in the traditional system. Sixty-seven percent of grade seven to nine students at the Educatodos pilot centers achieved mastery of fourth-grade-equivalent Spanish, compared to 62 percent in public schools. Results in both cases declined significantly when students were evaluated with respect to sixth and seventh grade standards. In reviewing these results, it is important to note that Educatodos uses a program that integrates academic subjects within content areas or themes. The results, therefore, provide evidence that students are learning core subjects within an integrated approach. Costs per learning outcome could not be calculated because of data limitations.[6]

Implications for FTI

The three cases presented here as an initial phase of research into complementary models for providing basic education to underserved populations show how different supply models can contribute to achieving EFA goals and do so relatively cost-effectively. This research has implications for FTI in terms of:

- How analysis of the requirements for achieving EFA are conducted;
- The nature of education sector policies and strategies needed to achieve EFA; and
- Acceptance of complementary approaches as equivalent to public schooling and as viable and necessary strategies for achieving EFA.

From an analytical standpoint, this research contributes two perspectives worth considering. First, progress toward EFA needs to be examined, not just in terms of national-level changes in access and completion, but also in terms of how underserved

Complementary models for providing basic education to underserved populations can contribute to achieving EFA goals and do so cost-effectively.

regions and populations make progress toward EFA goals. In all countries, achieving EFA means creating the institutional arrangements that can ensure delivery of education services to underserved populations, including rural, poor, and female children and students of all ages who dropped out of school. Evaluation of any country's EFA status, as well as its strategies for progress, must include analysis of subnational data. Such analysis needs to identify and assess underserved populations and regions so that specific strategies for extending access and assuring completion among those targeted can be developed. Therefore, effectiveness in meeting EFA goals can be evaluated in terms of the additional access, completion, and learning obtained by the targeted populations.

Achieving EFA means creating the institutional arrangements that can ensure delivery of education services to underserved populations, including rural, poor, and female children and students of all ages who dropped out of school.

Second, methodologies for analyzing the costs and cost-effectiveness of complementary approaches to providing target populations access, completion, and learning must be developed, tested, and applied. These methodologies make it possible to more fully evaluate the financing requirements for achieving EFA. Additionally, comparisons of strategies for expanding and improving basic education could also include evaluation of the costs per completer or the costs per learning outcome as a way to judge how to best use investment dollars. As demonstrated in Ghana and Honduras, complementary education programs that provide condensed versions of basic education are likely more cost-effective. Even with completion rates comparable to public school rates, a shorter academic cycle costs less, even if unit costs are higher. As demonstrated in Mali, where unit costs for Community Schools are higher than for public schools, it is important to extract an understanding of the full costs of reaching underserved areas. Prevailing government unit cost should not be assumed to hold across all populations or regions.

Concerning education sector policies and strategies, research into complementary models of education offers insight into how different approaches can contribute to EFA goals and how different capacities and resources can be mobilized to support those approaches. Specifically, FTI needs to consider how nontraditional provision of education can figure into country strategies for reaching EFA. Large amounts of additional resources are needed to achieve EFA in FTI countries. However, achieving EFA depends primarily on the investment of resources to transform the existing system. Put another way, investment needs to bring other capacities, other approaches, and other actors to bear on the challenge of EFA. All the complementary models researched for this and subsequent studies show that successfully providing basic education to underserved populations requires a combination of efforts and actors. Although these programs all worked closely with government systems, they also drew on the human and financial resources of communities, civil society organizations, and private charities as well.

In case after case, complementary approaches have been successfully organized because they rely on several actors that include, but are not limited to, the national education system: communities, local and international nongovernmental organizations, education authorities, and external assistance providers. To take advantage of these experiences, government policy must shift away from administering and enforcing a single-supply model and move toward a pluralistic approach. Simply put, if the prevailing model for basic schooling continues to fail to meet the needs of specific

segments of the population, the government needs to seek out and encourage the development of other models as a matter of public policy, drawing on other resources and capacities or on alternatives that have proven their efficacy.

In an FTI context focused on budgetary support for government-led sector investment strategies, the pluralism inherent in the Community School experience argues for including the negotiation of complementary roles and responsibilities within a sectoral framework. Education sector policy needs to explicitly create space and mechanisms for public-private interaction and collaboration.

Successfully providing basic education to underserved populations requires a combination of efforts by various actors.

If donor countries operating within the framework of FTI are going to funnel resources through national education budgets, it becomes even more important to develop policies and procedures that will allow the public sector to enter into and manage relationships with nongovernmental actors, be they international or local organizations or communities themselves. Experience indicates that ministries of education are often unwilling to cede so much control and authority to local or nongovernmental actors—when they are willing, they are usually inexperienced and need to develop new systems and modes of operation to be able to make those relationships work effectively. This includes collaborating on developing alternative approaches to teacher recruitment, teacher support, curriculum, school management, and community-school interaction. It may also include contracting for services, allocating and disbursing government funds to private entities, setting up mechanisms for oversight and accountability, and collecting consistent information.

In addition to the public-private interaction, complementary programs have modeled inherently decentralized systems of schooling in many instances. Organizations have worked directly with communities and local governments and education authorities to run successful projects. The relationships at the local level are, in fact, a large contributing factor to the ability of these programs to operate and flourish. The highly centralized systems of administration and management that are the norm in most developing countries could benefit from looking at how decentralization has worked in the context of some large-scale complementary education projects. In Mali, local authorities have even created mechanisms for generating basic education resources. For example, some villages allocated a fixed percentage of the revenue generated from cotton sales to support their Community School. Control and decision-making authority make it possible to effectively raise and use resources locally and monitor teacher and school performance. Surveys of one group of Community School management committees in Mali found that more than three-quarters regularly checked on student and teacher attendance. Additionaly, according to Save the Children's *Annuaire statistique des programmes éducation et santé et nutrition scolaire du cercle de Kolondieba, 2003-2004*, they raised and spent an average of $159 per school.

More decentralized strategies that draw on and make use of a variety of governmental and nongovernmental actors require dramatically different capacity in the private and public sectors. For example, organizations may have the experience and on-the-ground

presence required to effectively engage communities and parents and to help them set up the necessary structures to open and operate schools using proven participatory methodologies. Government officials who have these tendencies or skills are rare. Conversely, government officials could play an important role in negotiating relationships, translating those relationships into contractual obligations, and monitoring the fulfillment of the terms of those contracts—these roles are often played by donors when complementary models are promoted through projects. Decentralization efforts usually focus more on building the capacity of local education authorities to administer state-run systems. Thus, these efforts would need to shift from maintaining local authorities' capacity to directly run education systems to building capacity to manage relationships. A variety of approaches must be deployed to meet the range of needs present across communities. Therefore, education authorities must abandon the prevailing goal of assuring the consistent delivery of a single supply model. This will not occur without significant investment in a changed framework and new set of capacities at the central ministry level and throughout the decentralized education administration.

Organizations should focus on how to use sector investment strategies to accomodate and expand complementary approaches to basic education and significantly increase quality.

For their part, private nongovernmental actors need to build their capacity to implement projects and assure high levels of quality and think critically about how their actions could enhance and extend public sector capacity. They also need to think more broadly about their role within developing countries and no longer define their mission as filling the space left vacant by government if provision of schooling is going to be progressively incorporated into the public education system. USAID and Save the Children's experience in Mali may, in fact, illustrate an opportunity missed to make this kind of shift in government-nongovernment relationships.

The lesson of complementary models is that basic education can be organized through different approaches that rely more on local and nongovernmental actors than the formal system. The challenge is finding ways to incorporate these strategies into the sector investment programs that draw the bulk of government and external financing and attention. The case studies show that complementary models contribute to EFA goals primarily by targeting underserved populations and modeling more democratic and decentralized approaches to school provision. While they are able to provide quality similar to public schools in some cases, they have yet to prove that they can deliver high-quality education. During the next decade, organizations should, therefore, focus on how to use sector investment strategies to not only accommodate and expand complementary approaches to basic education, but also significantly increase quality.

Notes

[1] DeStefano. 2005. *Meeting EFA: Mali – Community Schools* (EQUIP2 Country Brief). Washington, D.C.: Educational Quality Improvement Program 2 (EQUIP2), Academy for Educational Development (AED).

Hartwell. 2005. *Meeting EFA: Ghana – School for Life* (EQUIP2 Country Brief). Washington, D.C.: Educational Quality Improvement Program 2 (EQUIP2), Academy for Educational Development (AED).

Schuh-Moore. 2005. *Meeting EFA: Honduras – Educatodos* (EQUIP2 Country Brief). Washington, D.C.: Educational Quality Improvement Program 2 (EQUIP2), Academy for Educational Development (AED).

[2]The cost per learning outcome for public schools in Ghana is based on data showing that 8.7 percent of sixth graders achieve minimum competency in English. That rate of language proficiency was applied to third graders to obtain a comparable cost of learning. If only 8.7 percent of sixth graders are proficient, then even fewer third graders would arguably be, making this an underestimation of the cost of learning for grade three. Learning in Mali is based on the CEP pass rate for sixth graders.
[3] Total costs include recurrent costs, donor investments, development costs, and capital costs.
[4] Recurrent costs are the recurring operational costs of running the program, but do not include any nongovernmental or donor investments, development costs, or capital costs.
[5] This calculation is based on recurrent costs only for students who stay in the program.
[6] Caution should be taken in comparatively interpreting these results. Students took this test in seventh grade of both the Educatodos program and the public school system. However, it is not clear whether the students in the Educatodos program had been long-term participants or had completed grades one to six in the public system. As a result, the only learning outcomes attributable directly to the Educatodos program were the increases in learning that occurred for students in pilot centers.

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